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Effective on 12/08/2004.
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL
For FY 2005

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT	($)	500.00

Complete if Known	
Application Number	09/864,831
Filing Date	May 24, 2001
First Named Inventor	Hrovat, et al.
Examiner Name	Faye M. Fleming
Art Unit	3616
Attorney Docket No.	81048525

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____

☑ Deposit Account Deposit Account Number: 06-1510 Deposit Account Name: Ford Motor Co.

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☑ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, **except for the filing fee**

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FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES Fee ($)	FILING FEES Small Entity Fee ($)	SEARCH FEES Fee ($)	SEARCH FEES Small Entity Fee ($)	EXAMINATION FEES Fee ($)	EXAMINATION FEES Small Entity Fee ($)	Fees Paid ($)
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Fee ($)	Small Entity Fee ($)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180

Total Claims _____ - 20 or HP = _____ x Fee ($) _____ = Fee Paid ($) _____

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims _____ - 3 or HP = _____ x Fee ($) _____ = Fee Paid ($) _____

HP = highest number of independent claims paid for, if greater than 3.

Multiple Dependent Claims Fee ($) _____ Fee Paid ($) _____

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets _____ - 100 = Extra Sheets _____ / 50 = Number of each additional 50 or fraction thereof _____ (round up to a whole number) x Fee ($) _____ = Fee Paid ($) _____

4. OTHER FEE(S)

Fees Paid ($)

Non-English Specification, $130 fee (no small entity discount) _____

Other (e.g., late filing surcharge): Appeal Brief 500.00

SUBMITTED BY

Signature		Registration No. (Attorney/Agent) 50,579	Telephone 248-223-9500
Name (Print/Type)	Jeffrey J. Chapp		Date June 30, 2006

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Davorin David Hrovat, et al.

Serial No.: 09/864,831 Group Art Unit: 3616

Filed: May 24, 2001 Examiner: Fleming, Faye M.

Title: ROLL OVER STABILITY CONTROL FOR AN AUTOMOTIVE VEHICLE HAVING AN ACTIVE SUSPENSION

Atty. Docket No.: 81048525

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Appeal Brief-Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

June 30, 2006 (Date of Deposit) Jo Anne Croskey Jo Anne Croskey (Signature)

APPEAL BRIEF

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The following Appeal Brief is submitted in response to the Final Office Action dated December 20, 2005, and the Notice of Appeal filed May 4, 2006, in the above-identified application.

07/05/2006 CNEGA1 00000029 061510 09864831
01 FC:1402 500.00 DA

I Real Party in Interest

The real party in interest in this matter is The Ford Global Technologies, Inc. in Dearborn, Michigan (hereinafter "Ford"), which is the assignee of the present invention and application.

II Related Appeals and Interferences

There are no other known appeals or interferences, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

III Status of the Claims

Claims 1-22 are currently pending. Claims 1-22 stand under final rejection, from which this Appeal is taken. A copy of the claims on appeal is attached as an Appendix A.

IV Status of Amendments

In the Response of May 9, 2005, the independent claims 1, 12, and 18 and were amended in response to the Non-Final Office Action of September 21, 2005. In the May 9th Response and in the Response of December 20th, 2005 remarks were provided for the allowance of all currently pending claims. There have been no amendments filed subsequent to the May 9th Response.

V Summary of Claimed Subject Matter

By way of summary, the present invention is directed to a rollover control system and to methods of controlling rollover stability of a vehicle, as recited in independent claims 1, 12, and 18. Claims 1, 12, and 18 encompass several points of novelty. Since claims 2-11, 13-17, and 19-22 depend from claims 1, 12, and 18, respectively, they also contain at least the same points of novelty. The independent claims are similar and are therefore described together.

Claim 1 recites a rollover control system 24 for an automotive vehicle 10 that includes an active suspension 49, which has an independently adjustable

unloading side and an independently adjustable loading side. A rollover sensor 28-37 generates a rollover signal in response to an imminent rollover of the vehicle. A controller 26 is coupled to the rollover sensor 28-37 and controls the active suspension 49 to generate a restoring torque in response to the rollover signal. See pages 5-10 and 12-14, paragraphs [0019]-[0033] and [0042]-[0045] of the specification, and Figures 3-4.

Claim 12 recites a method of controlling rollover stability of a vehicle 10, which has an active suspension 49. The active suspension 49 has a first side suspension and a second side suspension. The method includes sensing imminent rollover of the vehicle 10 and generating a rollover signal in response thereto. A restoring torque is generated in response to the rollover signal by controlling the active suspension 49. See pages 5-10 and 12-14, paragraphs [0019]-[0033] and [0042]-[0045] of the specification, and Figures 3-4.

Claim 18 also recites a method of controlling rollover stability of a vehicle 10, which has a first side suspension and a second side suspension. Claim 18 includes all of the limitations of claim 12. Claim 18 also includes the limitations of determining a loading side and an unloading side of the vehicle 10 in response to the rollover signal, unloading the first side suspension corresponding to the unloading side suspension, loading the second side suspension corresponding to the loading side suspension, and generating the restoring torque in response to the steps of unloading and loading to counter the imminent rollover. See pages 5-10 and 12-14, paragraphs [0019]-[0033] and [0042]-[0045] of the specification, and Figures 3-4.

The system and methods of claims 1, 18, and 20 provide roll stability control via an active suspension 49. This control is provided without yaw condition dependency. Also, the active suspension 49 provides additional restoring torque that in certain situation cannot be obtained through braking or steering alone, as stated in paragraph [0042] of the present application and elsewhere. The active suspension 49 is controllable and thus is one that includes suspension actuators 48-54, which are used to extend or retract the suspension or portions thereof. The actuators 48-54 may be of various types and styles and, for

example, may include electrical motors and hydraulic fluid devices, as stated in paragraph [0033] of the present application. A passive suspension is one that does not contain such actuation devices.

Applicants admit that the prior art includes passive suspensions. Applicants further admit that the prior art discloses a roll rate sensor for the generation of a roll rate signal. What is not known or suggested are the several novel limitations recited in claims 1, 12, and 18 and associated aspects thereof, which are utilized in combination. All of the novel limitations of claims 1, 12, and 18 are not taught or suggested by the prior art separately or in combination. The limitations are stated in detail below.

What is not known or suggested is the limitation of controlling an active suspension to generate a restoring torque in response to a rollover signal. What is also not known or suggested is the limitation of unloading the first side suspension corresponding to the unloading side suspension. What is further not known or suggested is the limitation of loading the second side suspension corresponding to the loading side suspension. Moreover, what is also not known or suggested is the limitation of generating the restoring torque in response to the steps of unloading and loading to counter an imminent rollover.

What is also not known or suggested are the several novel limitations and combinations that are further recited in dependent claims 2-11, 13-17, and 19-22. The limitations are stated in detail below.

Claim 2 recites the system of claim 1 wherein the controller 26 controls the loading side to a loaded condition and controls the unloading side to an unloaded condition to provide the restoring torque. See pages 12-14, paragraphs [0042]-[0045] of the specification, and Figure 4.

Claim 3 recites the system of claim 1 wherein the controller 26 controls the loading side to a loaded condition and simultaneously controls the unloading side to an unloaded condition to provide the restoring torque. See pages 12-14, paragraphs [0042]-[0045] of the specification, and Figure 4.

Claim 4 recites the system of claim 1 wherein the rollover sensor 28-37 comprises a speed sensor 30 generating a first signal corresponding to wheel

speed of the vehicle 10. See pages 6 and 12, paragraphs [0020], [0029], and [0042] of the specification and elsewhere, and Figure 3.

Claim 5 recites the system of claim 1 wherein the rollover sensor 28-37 is selected from the group of a speed sensor 30, a lateral acceleration sensor 32, a roll rate sensor 34, a yaw rate sensor 28 and a longitudinal acceleration sensor 36. See pages 6 and 12, paragraphs [0020] and [0042] of the specification and elsewhere, and Figure 3.

Claim 6 recites the system of claim 1 wherein the rollover sensor 28-37 is selected from the group of a speed sensor 30, a lateral acceleration sensor 32, a roll rate sensor 34, a yaw rate sensor 28 and a steering wheel angle sensor 35. See pages 6 and 12, paragraphs [0020] and [0042] of the specification and elsewhere, and Figure 3.

Claim 7 recites the system of claim 1 further comprising a sensor selected from the group of a steering angle sensor 35, acceleration sensor 32, 36 and a pitch rate sensor 37. See pages 6 and 12, paragraphs [0020] and [0042] of the specification and elsewhere, and Figure 3.

Claim 8 recites the system of claim 1 wherein the controller 26 determines vehicle speed at a center of gravity of the vehicle 10 in response to a steering angle from a steering sensor 35. See pages 8 and 10 and paragraphs [0029] and [0034] of the specification and elsewhere.

Claim 9 recites the system of claim 1 further comprising a brake controller 38 coupled to the controller 26, the brake controller 38 controlling front brake force and rear brake force in response to the rollover signal. See pages 6, 8-9, and 12 and paragraphs [0020], [0029]-[0030], and [0042] of the specification.

Claim 10 recites the system of claim 9 wherein the controller 26 changes the restoring torque by changing a steering angle factor in combination with a brake force distribution. See page 6 and paragraph [0020] of the specification and elsewhere.

Claim 11 recites the system of claim 1 wherein the controller 26 changes the restoring torque by controlling steered wheels. See pages 7-8 and 13-14 and paragraphs [0026]-[0027], [0043]-[0044], and [0045] of the specification.

Claim 13 recites the method of claim 12 wherein the step of generating a restoring torque comprises unloading the first side suspension. See pages 12-14, paragraphs [0042]-[0045] of the specification, and Figure 4.

Claim 14 recites the method of claim 12 wherein the step of generating a restoring torque comprises loading the second side suspension corresponding to the loading side suspension. See pages 12-14, paragraphs [0042]-[0045] of the specification, and Figure 4.

Claim 15 recites the method of claim 12 wherein the step of generating a restoring torque comprises generating a restoring torque in response to the rollover signal by controlling the active suspension 49 and a brake force distribution. See pages 12-14, paragraphs [0042]-[0045] of the specification, and Figure 4.

Claim 16 recites the method of claim 12 wherein the step of generating a restoring torque comprises generating a restoring torque in response to the rollover signal by controlling the active suspension 49 and a steering angle. See pages 12-14, paragraphs [0042]-[0045] of the specification, and Figure 4.

Claim 17 recites the method of claim 12 wherein the step of generating a restoring torque comprises simultaneously unloading the first side suspension and loading the second side suspension corresponding to the loading side suspension. See pages 12-14, paragraphs [0042]-[0045] of the specification, and Figure 4.

Claim 19 recites the method of claim 18 wherein prior to the step of loading and unloading generating the restoring torque by changing a steering angle of the vehicle 10. See pages 6, 8, and 10 and paragraphs [0020], [0029], and [0034] of the specification and elsewhere.

Claim 20 recites the method of claim 18 wherein prior to the step of loading and unloading generating the restoring torque by changing a brake force distribution. See page 6 and paragraph [0020] of the specification and elsewhere.

Claim 21 recites the method of claim 18 wherein prior to the step of loading and unloading generating the restoring torque by changing a steering

angle factor in combination with a brake force distribution. See page 6 and paragraph [0020] of the specification and elsewhere.

Claim 22 recites the method of claim 18 wherein the steps of loading and unloading are performed simultaneously. See pages 13-14 and paragraphs [0043] and [0045] of the specification.

VI Grounds of Rejection to be Reviewed on Appeal

The following issue is the only issue presented in this Appeal, which corresponds directly to the Examiner's final grounds for rejection in the Final Office Action of March 9, 2006, hereinafter referred to as the "Final Office Action". The issue is whether claims 1-22 are anticipated under 35 U.S.C. 102(e) by Brown et al. (U.S. Pat. No. 6,263,261).

VII Argument

A. THE REJECTION OF CLAIMS 1-22 UNDER 35 U.S.C. 102(e)

Claims 1-22 stand fully rejected under 35 U.S.C. § 102(e) as being anticipated by Brown. Since the limitations of independent claims 1, 12, and 18 are similar, arguments asserting their novelty and nonobviousness are presented together below.

Brown discloses a roll over stability control system 24. The system 24 includes a controller 26, which receives signals from sensors 28-37. In response to the stated signals the controller 26 signals a brake control 38 to control brakes 40-46.

The Office Actions state that A) Brown teaches a roll rate sensor 34 and a pitch sensor 37 that may sense a roll condition based on sensing the linear or rotational relative displacement or displacement velocity of one or more of the suspension chassis components and B) Brown teaches that a roll condition may be determined by sensing the force or torque associated with the loading condition of one or more suspension or chassis components including a pressure transducer in a suspension actuator. Appellants agree that Brown discloses a roll rate sensor 34 and a pitch sensor 37. However, the above underlined items

of A and B are not stated, shown, taught, or suggested anywhere in Brown. Appellants have searched Brown and have not been able to find any such disclosure. Appellants note that the terms "suspension", "actuator", height", "linear", and "displacement" or the like are not recited anywhere in Brown. Brown uses the signals from the roll rate sensor 34 and a pitch sensor 37 to determine a roll condition and from that control brake pressure. Brake pressure is applied to reduce the yaw torque. This is substantially different than the controlling of a suspension or of suspension actuators. Besides, nowhere in Brown is the force or torque on a suspension measured. The only pressure referred to in Brown is brake pressure not pressure within a suspension actuator. A pressure transducer is not disclosed in Brown.

Appellants submit that the measuring or sensing of suspension characteristics does not infer the use of an active suspension. A system may detect suspension characteristics to determine a roll condition and in response thereto actuate brakes to prevent a roll event. Nevertheless, such sensing is not disclosed in Brown and/or is not directed to the status of a suspension.

The Final Office Action states that the system of Brown is an active suspension because the suspension is controlled and that such control is based on the disclosed sensors. Appellants submit that a suspension is not disclosed in Brown let alone controlled. Also, the disclosed sensors are used for brake control not for suspension control.

Claims 1, 12, and 18 also refer to an active suspension that has an independently adjustable unloading side and an independently adjustable loading side and the adjustment thereof. Nowhere in Brown are these features taught or suggested. This is especially true since Brown fails to disclose a suspension.

Since Brown clearly fails to teach or suggest several of the limitations recited in the independent claims and since an active suspension and control thereof can not be inferred, Appellants can only assume that the Examiner is asserting Official Notice and or is using improper hindsight reasoning in view of the present application. Referring to MPEP 2144.03, Official Notice unsupported

by documentary evidence should only be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known. The notice of facts beyond the record, which may be taken by the Examiner, must be "capable of such instant and unquestionable demonstration as to defy dispute." *In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970). Appellants submit that the limitations in question are not capable of such instant and unquestionable demonstration as to defy dispute. Specific knowledge of the prior art must always be supported by citation to some reference work recognized as standard in the pertinent art. *Id.* at 1091, 165 USPQ at 420-21. Any facts so noticed should be of notorious character and serve only to "fill in the gaps" in an insubstantial manner. It is never appropriate to rely solely on common knowledge in the art without evidentiary support in the record as the principal evidence upon which a rejection was based. *In re Zurko*, 258 F.3d at 1386, 59USPQ2d at 1697 (Fed. Cir. 2001). The facts constituting the state of the art are normally subject to the possibility of rational disagreement among reasonable men and are not amendable to the taking of such notice. *In re Eynde*, 480 F.2d 1364, 1370, 178 USPQ 470, 474 (CCPA 1973). Ordinarily, there must be some form of evidence in the record to support an assertion of common knowledge. General conclusions concerning what is "basic knowledge" or "common sense" to one of ordinary skill in the art without specific factual findings and some concrete evidence in the record to support these findings will not support an obviousness rejection. *In re Lee*, 277 F.3d at 1344-45, 61 USPQ2d at 1434-35 (Fed. Cir. 2002). The Examiner must provide specific technical and scientific reasoning to support his or her conclusion of common knowledge. *In re Soli*, 317 F.2d at 946, 37 USPQ at 801 (CCPA 1963).

Appellants are aware that hindsight reasoning is proper so long as it takes into account only knowledge which was within the level of ordinary skill at the time of the claimed invention was made and does not include knowledge gleaned only from the Appellants' disclosure. Appellants believe that to arrive at a conclusion of obviousness, especially in view of the above relied upon

reference, can only be made through the gleaning of knowledge from Appellants' disclosure.

In order for a reference to anticipate a claim the reference must teach or suggest each and every element of that claim, see MPEP 2131 and *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628. Thus, since Brown fails to teach or suggest each and every element of claims 1, 12, and 18, they are believed to be independently patentable and allowable for the reasons set forth above.

Claim 2 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 1. Claim 2 is further believed to be independently patentable and allowable since it further recites wherein the controller controls the loading side to a loaded condition and controls the unloading side to an unloaded condition to provide the restoring torque. Brown does not disclose an active suspension. Also, there is no motivation or suggest to modify Brown as is needed to arrive at the invention of claim 2.

Claim 3 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 1. Claim 3 is further believed to be independently patentable and allowable since it further recites wherein the controller 26 controls the loading side to a loaded condition and simultaneously controls the unloading side to an unloaded condition to provide the restoring torque. Brown does not disclose an active suspension. Also, there is no motivation or suggest to modify Brown as is needed to arrive at the invention of claim 3.

Claim 4 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 1. Claim 4 is further believed to be independently patentable and allowable since it further recites wherein the rollover sensor 28-37 comprises a speed sensor 30 generating a first signal corresponding to wheel speed of the vehicle 10. Also, there is no motivation or suggest to modify Brown as is needed to arrive at the invention of claim 4.

Claim 5 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 1. Claim 5 is further believed to be independently patentable and allowable since it further recites wherein the

rollover sensor 28-37 is selected from the group of a speed sensor 30, a lateral acceleration sensor 32, a roll rate sensor 34, a yaw rate sensor 28 and a longitudinal acceleration sensor 36. Also, there is no motivation or suggest to modify Brown as is needed to arrive at the invention of claim 5.

Claim 6 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 1. Claim 6 is further believed to be independently patentable and allowable since it further recites wherein the rollover sensor 28-37 is selected from the group of a speed sensor 30, a lateral acceleration sensor 32, a roll rate sensor 34, a yaw rate sensor 28 and a steering wheel angle sensor 35. Also, there is no motivation or suggest to modify Brown as is needed to arrive at the invention of claim 6.

Claim 7 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 1. Claim 7 is further believed to be independently patentable and allowable since it further recites further comprising a sensor selected from the group of a steering angle sensor 35, acceleration sensor 32, 36 and a pitch rate sensor 37. Also, there is no motivation or suggest to modify Brown as is needed to arrive at the invention of claim 7.

Claim 8 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 1. Claim 8 is further believed to be independently patentable and allowable since it further recites wherein the controller determines vehicle speed at a center of gravity of the vehicle 10 in response to a steering angle from a steering sensor 35. Also, there is no motivation or suggest to modify Brown as is needed to arrive at the invention of claim 8.

Claim 9 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 1. Claim 9 is further believed to be independently patentable and allowable since it further recites further comprising a brake controller 38 coupled to the controller 26, the brake controller 38 controlling front brake force and rear brake force in response to the rollover signal. Also, there is no motivation or suggest to modify Brown as is needed to arrive at the invention of claim 9.

Claim 10 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 9. Claim 10 is further believed to be independently patentable and allowable since it further recites wherein the controller 26 changes the restoring torque by changing a steering angle factor in combination with a brake force distribution. Also, there is no motivation or suggest to modify Brown as is needed to arrive at the invention of claim 10.

Claim 11 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 1. Claim 11 is further believed to be independently patentable and allowable since it further recites wherein the controller 26 changes the restoring torque by controlling steered wheels. Also, there is no motivation or suggest to modify Brown as is needed to arrive at the invention of claim 11.

Claim 13 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 12. Claim 13 is further believed to be independently patentable and allowable since it further recites wherein the step of generating a restoring torque comprises unloading the first side suspension. Brown does not disclose an active suspension 49. Also, there is no motivation or suggest to modify Brown as is needed to arrive at the invention of claim 13.

Claim 14 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 12. Claim 14 is further believed to be independently patentable and allowable since it further recites wherein the step of generating a restoring torque comprises loading the second side suspension corresponding to the loading side suspension. Brown does not disclose an active suspension. Also, there is no motivation or suggest to modify Brown as is needed to arrive at the invention of claim 14.

Claim 15 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 12. Claim 15 is further believed to be independently patentable and allowable since it further recites wherein the step of generating a restoring torque comprises generating a

restoring torque in response to the rollover signal by controlling the active suspension 49 and a brake force distribution. Brown does not disclose an active suspension 49. Also, there is no motivation or suggest to modify Brown as is needed to arrive at the invention of claim 15.

Claim 16 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 12. Claim 16 is further believed to be independently patentable and allowable since it further recites wherein the step of generating a restoring torque comprises generating a restoring torque in response to the rollover signal by controlling the active suspension 49 and a steering angle. Brown does not disclose an active suspension 49. Also, there is no motivation or suggest to modify Brown as is needed to arrive at the invention of claim 16.

Claim 17 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 12. Claim 17 is further believed to be independently patentable and allowable since it further recites wherein the step of generating a restoring torque comprises simultaneously unloading the first side suspension and loading the second side suspension corresponding to the loading side suspension. Brown does not disclose an active suspension 49. Also, there is no motivation or suggest to modify Brown as is needed to arrive at the invention of claim 17.

Claim 19 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 18. Claim 19 is further believed to be independently patentable and allowable since it further recites wherein prior to the step of loading and unloading generating the restoring torque by changing a steering angle of the vehicle. Also, there is no motivation or suggest to modify Brown as is needed to arrive at the invention of claim 19.

Claim 20 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 18. Claim 20 is further believed to be independently patentable and allowable since it further recites wherein prior to the step of loading and unloading generating the restoring

torque by changing a brake force distribution. Also, there is no motivation or suggest to modify Brown as is needed to arrive at the invention of claim 20.

Claim 21 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 18. Claim 20 is further believed to be independently patentable and allowable since it further recites wherein prior to the step of loading and unloading generating the restoring torque by changing a steering angle factor in combination with a brake force distribution. Also, there is no motivation or suggest to modify Brown as is needed to arrive at the invention of claim 21.

Claim 22 is believed to be independently patentable and allowable for the reasons set forth above since it depends from claim 18. Claim 22 is further believed to be independently patentable and allowable since it further recites wherein the steps of loading and unloading are performed simultaneously. Brown does not disclose an active suspension 49. Also, there is no motivation or suggest to modify Brown as is needed to arrive at the invention of claim 22.

VIII Appendix

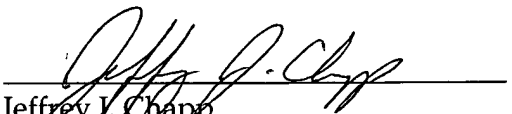
A copy of the claims involved in this Appeal, namely claims 1-22, is attached hereto as Appendix A. An evidence Appendix B and a related proceedings Appendix C are also provided.

IX Conclusion

For the reasons advanced above, Appellant respectfully contends that each claim is patentable. Therefore reversal of the rejection is requested.

Respectfully submitted,

ARTZ & ARTZ, P.C.



Jeffrey J. Chapp
Registration No. 50,579
28333 Telegraph Road, Suite 250
Southfield, MI 48034
(248) 223-9500

Dated: June 30, 2006

APPENDIX A

What is claimed is:

1. A rollover control system for an automotive vehicle comprising:

an active suspension having an independently adjustable unloading side and a an independently adjustable loading side;

a rollover sensor generating a rollover signal in response to an imminent rollover of the vehicle; and

a controller coupled to said rollover sensor for controlling the active suspension to generate a restoring torque in response to the rollover signal.

2. A rollover control system as recited in claim 1 wherein said controller controls the loading side to a loaded condition and controls the unloading side to an unloaded condition to provide the restoring torque.

3. A rollover control system as recited in claim 1 wherein said controller controls the loading side to a loaded condition and simultaneously controls the unloading side to an unloaded condition to provide the restoring torque.

4. A rollover control system as recited in claim 1 wherein said rollover sensor comprises a speed sensor generating a first signal corresponding to wheel speed of the vehicle.

5. A rollover control system as recited in claim 1 wherein said rollover sensor is selected from the group of a speed sensor, a lateral acceleration sensor, a roll rate sensor, a yaw rate sensor and a longitudinal acceleration sensor.

6. A rollover control system as recited in claim 1 wherein said rollover sensor is selected from the group of a speed sensor, a lateral acceleration sensor, a roll rate sensor, a yaw rate sensor and a steering wheel angle sensor.

7. A rollover control system as recited in claim 1 further comprising a sensor selected from the group of a steering angle sensor, acceleration sensor and a pitch rate sensor.

8. A rollover control system as recited in claim 1 wherein said controller determines vehicle speed at a center of gravity of the vehicle in response to a steering angle from a steering sensor.

9. A rollover control system as recited in claim 1 further comprising a brake controller coupled to said controller, said brake controller controlling front brake force and rear brake force in response to said rollover signal.

10. A rollover control system as recited in claim 9 wherein said controller changes the restoring torque by changing a steering angle factor in combination with a brake force distribution.

11. A rollover control system as recited in claim 1 wherein said controller changes the restoring torque by controlling steered wheels.

12. A method of controlling rollover stability of a vehicle having an active suspension having a first side suspension and a second side suspension comprising the steps of:

sensing imminent rollover of the vehicle and generating a rollover signal in response thereto;

generating a restoring torque in response to the rollover signal by controlling the active suspension.

13. A method as recited in claim 12 wherein the step of generating a restoring torque comprises unloading the first side suspension.

14. A method as recited in claim 12 wherein the step of generating a restoring torque comprises loading the second side suspension corresponding to the loading side suspension.

15. A method as recited in claim 12 wherein the step of generating a restoring torque comprises generating a restoring torque in response to the rollover signal by controlling the active suspension and a brake force distribution.

16. A method as recited in claim 12 wherein the step of generating a restoring torque comprises generating a restoring torque in response to the rollover signal by controlling the active suspension and a steering angle.

17. A method as recited in claim 12 wherein the step of generating a restoring torque comprises simultaneously unloading the first side suspension and loading the second side suspension corresponding to the loading side suspension.

18. A method of controlling rollover stability of a vehicle having a first side suspension and a second side suspension comprising the steps of:

sensing imminent rollover of the vehicle and generating a rollover signal in response thereto;

determining a loading side and an unloading side of the vehicle in response to the rollover signal;

unloading the first side suspension corresponding to the unloading side suspension;

loading the second side suspension corresponding to the loading side suspension;

generating a restoring torque in response to the steps of unloading and loading to counter the imminent rollover.

19. A method as recited in claim 18 wherein prior to the step of loading and unloading generating the restoring torque by changing a steering angle of the vehicle.

20. A method as recited in claim 18 wherein prior to the step of loading and unloading generating the restoring torque by changing a brake force distribution.

21. A method as recited in claim 18 wherein prior to the step of loading and unloading generating the restoring torque by changing a steering angle factor in combination with a brake force distribution.

22. A method as recited in claim 18 wherein the steps of loading and unloading are performed simultaneously.

APPENDIX B

No submitted or entered evidence.

APPENDIX C

No related proceedings.